

ABSTRACT

The invention intends to reduce the manufacturing cost of the noise shaper for processing stereo signals, to reduce the occupancy area of the circuit, and to reduce the power consumption of the noise shaper. In order to process a serial digital stereo signal in time-sharing, the noise shaper takes on a construction including: a conversion means that converts the inputted stereo signals into a serial time-division-multiplexed signal; an integration means that applies a delta sigma modulation to an inputted signal, in which integrators for integrating the inputted signal are connected in multi-stages; and a means that outputs to separate a noise shaped signal into right and left channel signals. Here, the integration means possesses an adding means, two storage means to which an output from the adding means is inputted, and a selection means that selects in time-sharing either of the outputs from the two storage means. And, the output of the selection means is fed back to the adding means.